

I claim:

1. A method of making a throttle-valve housing and a throttle valve, comprising the steps of:
 - 5 - fabricating said housing and valve as a single cast injection molding, said housing comprising inner walls defining an internal through-opening, said valve comprising a radially encircling edge in contact with said inner wall; and
 - 10 - demolding said cast after said cast hardens; and
 - cutting along said edge so as to separate said valve and housing.
2. The method according to claim 1, wherein said
15 valve is in a closed position when said edge contacts said inner wall, said closed position being defined by the breaking of passage through said opening by said valve.
- 20 3. The method according to claim 1, further comprising the step of fitting said housing and valve for use in a motor vehicle.
4. The method according to claim 1, wherein said
25 opening comprises a central longitudinal axis and said method further comprises the step of pivotably mounting said valve along a pivot axis, said pivot axis extending transverse to said central axis.
- 30 5. The method according to claim 4, wherein said throttle valve comprises a shaft and a shaft bore positioned on said pivot axis said shaft bore shaped so as to rotatably accommodate a portion of said shaft therein, and said method further comprising the step of
35 mounting said shaft into said shaft bore such that ends of said shaft extend beyond said shaft bore.

6. The method according to claim 5, further comprising the step of providing a pair of opposing bearing bores in said housing, said bearing bores shaped and positioned to accommodate said ends therein.
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7. The method according to claim 6, further comprising the steps of:
- - inserting a core part in each of said bearing bores, each of said part having a diameter
- 10 substantially equivalent to an internal diameter of said bearing bore and an outer diameter of said shaft bore, said bore further having a flat side face which faces one another when each of said bores is inserted into each of said bearing bores.
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8. The method according to claim 7, wherein said bearing bores have a larger cross section than said shaft bore.
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9. The method according to claim 8, further comprising the step of inserting at least one bearing into each of said bearing bores between said end and said bearing bore internal wall thereby facilitating rotation of said ends within said bearing bores.
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10. The method according to claim 9, wherein said at least one bearing is a rolling-contact bearing.
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11. The method according to claim 6, wherein said throttle valve comprises a hub-like thickened portion through which said shaft bore extends substantially coaxially.
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12. The method according to claim 11, wherein a cross section of said thickened portion is produced to approximately correspond to a cross section of said bearing bores.

13. The method according to claim 7, wherein said step
of inserting further comprises the step of inserting a
portion of each of said parts into said opening via
5 said bearing bores.

14. The method according to claim 1, wherein said step
of cutting further comprises the step of using a laser
to perform said step of cutting.

15 15. The method according to claim 1, wherein said step
of cutting further comprises the step of using a
cutting tool to perform said step of cutting.

16. The method according to claim 12, wherein said
step of cutting further comprises the step of using a
cutting tool to perform said step of cutting.

17. The method according to claim 16, wherein said
20 cutting tool is introduced axially into said opening
and has an encircling cutting edge a peripheral contour
of which corresponds to an inner contour of said
opening, said inner contour being located proximate to
said throttle valve.

25 18. The method according to claim 17, wherein said
peripheral contour comprises recesses which
approximately correspond to a cross section of said
hub-like thickened portion of the throttle valve.

30 19. The method according to claim 16, wherein said
throttle valve, in said closed position, is inclined to
said longitudinal axis at an angle substantially but
not equal to a right angle inclined with respect to
35 said longitudinal axis, and said peripheral contour
further defines a cutting plane inclined at said angle.

20. The method according to claim 1, further comprising the step of producing said throttle-valve housing and throttle valve as a plastic injection molding.

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21. The method according to claim 1, further comprising the step of producing said throttle-valve housing and throttle valve as a light-metal injection molding.

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22. The method according to claim 21, wherein said light metal comprises aluminum.